CHAPTER 11. TRANSPORTATION

Transportation is one of the biggest challenges facing village fish processing plants. It costs more—sometimes much more—to ship fish products to U.S. or foreign markets from most western and interior Alaska villages than it does from processing plants on the coast of southeast or southcentral Alaska. It also costs more to bring in supplies.

Most village processing plants have only two transportation options. Fresh products have to be shipped by air. Frozen products can be shipped by water or air.

It’s important to think realistically about what your transportation costs will be and what you can do to keep them as low as possible. Higher transportation costs can make it difficult for village fish plants to compete with plants in other parts of Alaska—especially if they have access to jet service.

If you are shipping fresh products by air, your transportation costs will depend on what length runway your village has, what kind of planes can land on it, and what kind of scheduled flight service is available. If only small planes can land at your village, your costs will also depend on how far planes need to fly to get to a larger airport with jet service. If you have to fly product a long way in small planes, it may be more difficult to operate a fish plant successfully in your village.

If you are flying fresh fish, it also matters how quickly you can get them to market, and how they are handled along the way. Fresh fish products have a limited shelf life and they can spoil quickly and lose all their value if they are not kept chilled. It is essential—but not easy—to make sure that your fish can get to market in good condition.

You also need to think about whether you can get reliable transportation so you can get your products to your customers when they are expecting them. If bad weather, mechanical problems with planes, or not having enough planes make it impossible for you to ship your fresh fish, you need to have a backup plan for what you will do instead. Having a reliable way to refrigerate your product locally is a big plus.
Can you ship your products to market at a reasonable cost?

If you are selling fresh fish, can you get reliable transportation to get your products to market quickly and in good condition?

**Transportation to your Plant**

Your first transportation challenge in operating a village fish processing plant is getting people, supplies, equipment, and replacement parts to your plant. Normally you will try to ship as much as you can by barge—particularly bulk goods—or by bypass mail. You have to do a lot of careful planning before the season to make sure you have everything you need when you need it.

You have to plan for what can go wrong. Will the barge bring the bulk goods when you expect them? Will the mails and air freight arrive when you expect them? If the wrong part arrives, what will it cost to send it back and how long will you have to wait? Your entire operation can be put on hold if you don’t have people, supplies and working equipment when you need them. Part of planning for what can go wrong is having backup equipment and parts on hand for when something breaks.

**Choices in Shipping Fresh Fish**

In many ways it’s easier for a village fish processing plant to produce fresh products rather than frozen products, because you don’t need to have freezing equipment and a way of storing your frozen product. However, shipping fresh fish to market can be complicated, costly, and risky.

One challenge is figuring out the most cost-effective way to ship your fish. You have to think about several related questions at the same time:

🤔 **What options are available at what costs?** What types of aircraft can land at your village? How often are there scheduled flights? How much fish could they fly out for you? How reliably would they have room for your fish? What types of charter service is available? What would it cost?

Scheduled air service is generally cheaper, but it may not be frequent or reliable enough to meet your needs.

🤔 **How much fish are you shipping?**

Shipping fish on larger planes in larger volumes is generally cheaper—but only if the planes are flying full.
What kind of containers are you shipping your fish in?

Shipping fish in larger containers—such as 1000 lb totes rather than 100 lb wetlock boxes—saves on labor costs and packaging costs. But you need a larger plane to ship in larger containers, and you have to have enough fish for the plane to fly full.

Who is going to fly it? How much can they lift? What’s the cost per pound? Are you limited to a 206? Because that definitely jacks the cost up. If you can get a DC3 or a DC6 in there that changes the equation substantially. But then you’ve got to be able to handle that many fish, store that many fish, chill that many fish.

—An experienced Alaska fish processor

You can fly fish out of just about anywhere at some price, but whether you can do it and make money is very dependent on your transportation.—An experienced Alaska fish processor

Boxes of fresh halibut ready to be trucked from the Mekoryuk Fish Plant to the Mekoryuk airstrip. Every step in handling fish—like this one—costs money.
Two options for flying fresh fish from Quinhagak. These pictures show two of the planes used to fly fresh fish from Quinhagak to Bethel during the 2000 salmon season. The plane in the top picture is a Twin Otter and the plane in the bottom picture is a Caravan. The Twin Otter was a scheduled mail passenger plane which flew every day. Regularly scheduled flights charge a fixed price per pound and are usually the least expensive. But the plant couldn’t predict how much the plane would be able to carry, because mail and passengers had priority. The Caravan was chartered by the plant and could carry a bigger load. But unless the plane flew with its full payload of 3300 lbs transportation costs per pound could get very high.
Two options for flying fresh fish from villages. Arctic Transportation Services (ATS), a major freight shipper in western Alaska operates CASAs and Cessna 207s. (From ATS website: www.atsak.com.)

The CASA is a twin, turbine-powered aircraft with a payload of up to 5,500 pounds.

The Cessna 207, the mainstay of rural Alaska air transportation, can handle 1,000-1,200 lbs on a good day, but only in 100 lb wetlock boxes. Like most smaller aircraft it has to be loaded from the side.

Loading 100-lb wetlock boxes of fresh H&G salmon into a Cessna 207.
Totes vs. Wetlock Boxes

1,000 lb totes are good for flying fresh fish, as they’re fairly inexpensive to buy and it takes less labor to pack them. But to use them you need a CASA or similar plane which can easily take up to five of them on a trip. For smaller aircraft, such as a Cessna 207, you’ll have to ship your fish in smaller containers, such as 100 lb wetlock boxes.

Challenges in Flying Fish from Quinhagak in 2000

Getting fresh fish from Quinhagak to Bethel and then on to Anchorage was one of the biggest challenges for the Quinhagak fish plant during the 2000 season. The biggest load that could be flown out of Quinhagak was a little more than 5,000 pounds. That meant that flying the fish from a 50,000-pound fishery opening sometimes took more than 12 flights per day—so that the plant needed every aircraft available to get the fish out.

Another challenge was the lack of a cool storage space in Bethel. Sometimes fish stored in Bethel during the day while waiting for evening flights to Anchorage were too warm for fresh sales by the time they reached Anchorage. To address that challenge, in 2001 Coastal Villages Seafoods placed a refrigerated van at the Bethel airport to hold product.

When you’re calculating the cost of shipping fish by air, don’t forget that rate quotes are based not on the weight of your fish but rather the “gross weight”—the total weight of the boxes, fish and anything else in the box such as gel ice. A box with 50 pounds of fish might have a gross weight of 57 pounds when the additional weight of the “tare”—the weight you’re shipping in addition to the fish—is included.

Also be sure to ask if fuel surcharges and taxes are included in rate quotes.

Making Sure Your Fish Arrive in Good Condition

Another major challenge in shipping fresh fish from a village processing plant is ensuring that it is kept chilled and arrives on time. Any mishandling or delays between when the fish leaves your plant and is delivered to your customer can cause loss of quality, damage to your relationship with your customer, and at worst total loss of your fish. To earn and maintain a reputation for producing high quality fish, it isn’t enough to make sure that the fishermen deliver high quality fish to the plant and the plant produces high quality products. You have to work just as hard to make sure that the quality isn’t lost in shipping the fish to market.
When you’re doing fresh it’s a lot of value and it can go bad quickly.
—An experienced Alaska fish processor

A lot can go wrong—and frequently does go wrong—in flying fresh fish to market from rural Alaska:

The plane may not arrive to fly your product when you expect or need it.  Bad weather, smoke from forest fires, and mechanical problems are just some of the reasons planes may not be available. You need a backup plan for how you will keep your fish chilled until transportation is available—or an alternative such as freezing.

If the fish are transferred along the way from one plane to another plane, the connecting flight may not arrive. You need to have a plan for how to ensure that the fish are kept chilled while they wait for another plane.

When they arrive at their final air destination, the fish may not be put into refrigeration or picked up by the customer when they are supposed to. You need to have a plan to ensure that the fish are kept in good condition until the customer takes possession and they are no longer your responsibility.

It’s a wise investment to pay extra to have people in each place where something could go wrong, to make sure that the fish are handled well everywhere. Even so, expect to spend a lot of time on the phone, following-up. You can also arrange for air carrier insurance, but it’s expensive, and it’s important to know exactly what you are insuring for and what the limitations of the policy are.

Developing a strong relationship with your local air carriers and your buyer should be an important part of your strategy for ensuring that you fish are handled well. If they know you and value their relationship with you, they may work harder to make sure that your fish arrive in good condition.

The challenges involved in transporting fish is one of the reasons that many processors sell to distributors, rather than to end users such as retail stores or restaurants. Distributors specialize in dealing with these challenges. But you will generally need to get your fish at least to Anchorage before a distributor will assume ownership.

Your distributor will take care of those problems for you—if you have a distributor. That’s the middleman people always talk about getting rid of. He’s got an office that has personal relationships with all the cargo handlers in all the airports in the United States.
—An experienced Alaska fish processor
How will you make sure that your fish are handled carefully, kept chilled, and delivered on time?

You need to think about that product getting sidelined somewhere along the track. It could get sidelined in Anchorage, if you’re lucky. Or it could also get sidelined in Denver in the middle of summer, where it’s a hundred degrees on the tarmac. And they just put your boxes off to the side. They’re going to get on the next plane. But then there’s a shift change, and one guy forgot to tell the other guy about these boxes out there on the tarmac and they cook.

You can’t avoid it. It will happen. It won’t happen regularly, but it will happen often enough. And when it happens it’s devastating. Because you have bought those fish and paid for all this stuff, and it’s a 100% loss.—An experienced Alaska fish processor

We’ve had fish going to a Lower-48 market all the way from an Alaska village. We had beautiful fillets into Bethel, into Anchorage, Fed-Exed all the way out, on the DHL truck. And the truck gets all the way to the doors of the distribution center; and it’s on the wrong pallet. And we get a call.

Sometimes it can be all the way there. We’ve had where the driver doesn’t have the right license going into the distribution center. And we’ll get a call—it will be somewhere in remote Alaska and you have to deal with that and you’ve got a melting ice cube and you have such a small window to get unloaded.

For everything you need a backup or a go-to person that can spring into action.—An experienced Alaska processor and distributor

Shipping Frozen Fish

If you have large enough production you can freeze fish and store and ship them to market in 40’ van loads (approximately 40,000 lbs). It is critical to make sure that the refrigeration units are functioning properly. You can lose all your production if they fail. You may also wish to buy shipping insurance.
Expediting

If you operate a fish processing business in a village, you will frequently need to do business with people in the city, usually in Anchorage or Seattle. You may need to purchase parts for equipment that has broken down, or supplies such as boxes, bags or bolts. You may need to deal with shipping problems in getting your products on the right plane to the right place. You may need to arrange for permits or paperwork.

It can be difficult, frustrating, and expensive to do this kind of business at a distance over the phone. In planning your plant, you should think about working with an expediter—someone in the city who can help you with big or little problems when you need help. It will probably be too expensive for you to hire a full-time employee, unless that person can combine helping you with doing another job, perhaps working for other organizations based in your village or your area. You may instead want to contract with someone to help you out on an as-needed basis.

You can't start a fish plant without expediting support. To run a fish business you have to have backup managerial help and backup parts, you have to have these things or you can lose your ass in one weekend. I could call them at 10:00 Friday night and tell them I need a carburetor by 10:00 tomorrow morning or we can't get our fish to the airport.

—A former Yukon River fish processing plant manager, talking about expediting assistance provided by the Community Economic Development Corporation

? How will you arrange for expediting help outside your village?